Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 13. (currently amended): A method of operating a fuel cell system comprising a plurality of fuel cells, each fuel cell comprising ~~an~~ a fuel inlet for a fuel, an anode having a catalyst associated therewith for producing cations from the fuel, a fuel manifold connected between the fuel inlet and the anode for distributing the fuel to the anode, an oxidant inlet means for supplying oxidant, a cathode having a catalyst associated therewith and connected to the oxidant inlet means for producing anions from the oxidant, said anions reacting with said cations to form water on said cathode and an ion exchange membrane disposed between the anode and the cathode, for facilitating migration of cations from the anode to the cathode, while isolating the fuel and oxidant from one another, the method comprising

(a) supplying one part of the oxidant ~~and fuel~~ to the oxidant inlet means ~~an the fuel inlet~~ of the fuel cells for reaction to generate electrical power and heat;

(b) providing a catalytic reactor for promoting reaction of the fuel and the oxidant, supplying the fuel to the catalytic reactor and supplying another part of the oxidant to the catalytic reactor in an amount less than the stoichiometric amount required for the combustion of the fuel supplied to the catalytic reactor, to ensure complete consumption of the other part the oxidant, thereby generating a flow of heated and humidified fuel; ~~and~~

(c) supplying the heated and humidified fuel to the fuel inlets of the fuel cells, for reaction with said one part of the oxidant to generate electricity and heat~~.~~; and

(d) supplying the fuel and the other part of the oxidant to the catalytic reactor, prior to supply thereof to the fuel cells.

Claim 14 (currently amended): A method as claimed in claim 13, which comprises, for initial start-up below a preset temperature, initially only supplying the fuel and the other part of oxidant ~~only~~ to the catalytic reactor to generate a flow of heated and humidified fuel, and passing the heated and humidified fuel through the fuel cells to preheat the fuel cells, and commencing supply of the one part of the oxidant to the fuel cells, once the fuel cells reach a desired temperature.

Claim 15 (currently amended): A method as claimed in claim 14, which includes, after start-up and after the fuel cells ~~has~~ have reached the desired temperature, supplying a sufficient quantity of the oxidant and the fuel to the catalytic reactor, to maintain the fuel supplied to the fuel cell system at a desired humidity level.

Claim 16 (currently amended): A method as claimed in claim 15, which includes: supplying air as the oxidant; providing the fuel cell system as an air-breathing system including vertical channels for flow of air as the oxidant; and providing ~~only~~ a portion of the air ~~required~~ as the other part of the oxidant ~~through~~ for the catalytic reactor, with additional air flowing directly through the channels of the fuel cell system as the one part of the oxidant.

Claim 17 (currently amended): A method as claimed in claim 13, which includes:

(a) providing a second catalytic reactor for promoting reaction of the fuel in the oxidant, supplying a further part of the fuel to the catalytic reactor and supplying at least a portion of the one part of the ~~oxygen~~ oxidant to the second catalytic reactor in an amount greater than the stoichiometric amount required for the combustion of the fuel to ensure complete consumption of the fuel and thereby to generate a flow of heated and humidified oxidant; and

(b) supplying the heated and humidified oxidant to the fuel cell for reaction with the heated and humidified fuel.

Claim 18 (original): A method as claimed in claim 17, wherein each of the first and second catalytic reactors is generally tubular.

Claim 19 (original): A method as claimed in claim 17, which includes supply lines for fuel and oxidant connected to the first and second catalytic reactors, and check valves in the supply lines for preventing back flow of oxidant and fuel.

Claim 20 (original): A method as claimed in claim 19, which includes flash arresters in the supply lines for the fuel connected to the first and second catalytic reactors.

Claim 21 (original): A method as claimed in claim 19 or 20, which includes a pump for delivering air as an oxidant to the first and second catalytic reactors.

Claims 22 (withdrawn) A method of operating a fuel cell system comprising a plurality of fuel cells, each fuel cell comprising a fuel ~~an~~ inlet for a fuel, an anode having a catalyst associated therewith for producing cations from the fuel, a fuel manifold connected between the fuel inlet and the anode for distributing the fuel to the anode, an oxidant inlet means for supplying oxidant, a cathode having a catalyst associated therewith and connected to the oxidant inlet means for producing anions from the oxidant, said anions reacting with said cations to form water on said cathode and an ion exchange membrane disposed between the anode and the cathode, for facilitating migration of cations from the anode to the cathode, while isolating the fuel and oxidant from one another, the method comprising:

(a) supplying ~~oxidant and~~ one part of the fuel to the fuel cell for reaction to generate electrical power and heat;

(b) providing a catalytic reactor for promoting reaction of the fuel and the oxidant, supplying another part of the fuel to the catalytic reactor and supplying the oxidant to the catalytic reactor in an amount greater than the stoichiometric amount required for the combustion of the other part of the fuel to ensure complete consumption

of the other part of the fuel, and thereby to generate a flow of heated and humidified oxidant; and

(c) supplying the heated and humidified oxidant to the fuel cell system, for reaction with the one part of the fuel ~~oxidant~~ to generate electricity and heat.; and

(d) supplying the oxidant and the other part of the fuel to the catalytic reactor, prior to supply thereof of the fuel cells.

Claim 23. (withdrawn) A method as claimed in claim 22, for which it comprises, for initial start-up below a preset temperature, initially supplying the fuel and oxidant only to the catalytic reactor to generate a flow of heated and humidified oxidant, and passing the heated and humidified oxidant through the fuel cells to pre-heat the fuel cells, and commencing supply of fuel to the fuel cells, once the fuel cells reach a desired temperature.

Claim 24 (withdrawn) A method as claimed in claim 22 or 23, which includes providing the catalytic reactor as a tubular reactor.

Claim 25 (withdrawn) A method as claimed in claims 22 or 23, which includes:

supplying air as the oxidant;

providing the fuel cell system as an air-breathing system including vertical channels for flow of air as the oxidant;

and providing only a portion of the air required as the oxidant through the catalytic reactor, with additional air flowing directly through the channels of the fuel cell system.

Claim 26 (new) A method as claimed in claim 13, 14, 15 and 16, which includes supplying one part of the fuel directly to the fuel cells and supplying another part of the fuel to the catalytic reactor for heating and humidification, and mixing the one part and the heated and humidified other part of fuel prior to supply to the fuel cell.

27. (new) A method as claimed in claim 22 and 23, which includes supplying one part of the oxidant directly to the fuel cells and supplying another part of the oxidant to the catalytic reactor for heating and humidification, and mixing the one part and the heated and humidified other part of the oxidant together prior to supply to the fuel cells.

Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 1. This sheet, which includes Fig. 1, replaces the original sheet including Fig. 1.

Also enclosed are formal drawings for Figures 1 – 5.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes